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ABSTRACT

This study focused on the implementation of "top-down" California state-initiated reform in secondary schools and the impact of that process on several outcomes: student academic achievement and the capacity of the organization to carry out ongoing reform. The research was part of a broader study of secondary school reform and how the reforms led to school change and school improvement. A case survey approach over one academic year and onsite visits by data collectors a small number of California secondary schools produced student, teacher, administrator, and total school organizational performance outcomes that were then ranked on a scale of 0 to 100 and compared to a similar study of California high schools prior to state-initiated reforms. The differences indicated the amount of change for the performance variables. In addition, interpretative performance categories were determined from the onsite visits. Finally, sites were clustered and compared according to their organizational capacity, defined as performance ratings based on student achievement as assessed by the California Assessment Program test (CAP). Findings indicated that reform implementation was effective due to comprehensive staff training, cooperation, and participation. In turn, the reforms led to CAP score improvements. The results suggest that "top-down" reform succeeds when reform content fits with local school districts' priorities and when schools and school districts transform the reform into their local agenda and context. (JAM)

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KEY FACTORS ASSOCIATED WITH THE EFFECTIVE IMPLEMENTATION AND IMPACT OF CALIFORNIA'S EDUCATIONAL REFORM

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Introduction

Considerable research has been conducted on factors associated with the successful implementation of change in public school settings. Beginning with the RAND change study (McLaughlin & Marsh, 1978), the research has identified lists of factors that are related to the extent of implementation (Fullan, 1982, 1985; Crandall, Eiseman, & Louis, 1985). Huberman and Miles (1984) extended the research by portraying how individual factors are related within a "causal net" of factors.

However, the research has focused primarily on implementation processes in elementary schools and has uncertain generalizability to implementation processes in secondary schools (Fullan, 1985; Purkey & Smith, 1985; Berman, Gjelton, Csezak, Izu & Marsh, 1984; Marsh, 1987). Several explanations have been offered for this uncertainty. Fullan (1985) and Purkey and Smith (1985) point to the lack of studies of school improvement in secondary schools. Berman et al. (1984) and Marsh (1987) report that the California School Improvement Program had different patterns of implementation and impact in elementary versus secondary schools, and based on this analysis, offer explanations for why secondary school implementation is different from that of elementary schools. Purkey and Smith (1985) also argue that secondary schools differ from elementary schools in three ways that influence the school reform process. Secondary schools are: a) organizationally more complex, b) politically more complicated, and c) have students who are less passive and more resistant to change (p. 367).

Recently, there has been much more extensive attention to how change can be implemented in secondary schools. Research has examined the implementation of the effective schools literature in secondary school settings (Purkey & Smith, 1985; Fullan, 1985; Farrar, Neufeld & Miles, 1983; Leithwood & Batcher, 1987). Research has also focused on the implementation of change in urban high schools (Louis & Cipollone, 1987; Farrar, 1987; Louis 1986a; Miles, 1986; Louis, 1986b). Another set of studies, led by Gene Hall, has focused on leadership for change in high schools (Hall, Hord, Guzman, Huling-Austin, Rutherford & Steigelbauer, 1984; Rutherford, Hord, Hulin-Austin, Steigelbauer, Murphy, Putman, Hall & Muscella, 1985).

One critical need within research on implementation processes for secondary schools is research on the implementation processes associated with state-initiated reform. This research is especially needed for several reasons. First, there have been numerous proposals for reform of secondary schools (National Commission on Excellence in Education, 1983; Boyer, 1983; Goodlad, 1984; Sizer, 1984) but these proposals typically have lacked discussion of the implementation of these reforms. Second, proposals for

implementing reform have lacked an adequate research base (McLaughlin, 1987; Goodlad, 1987). Third, states have been active in proposing and implementing secondary school reform, even without this research base, although Anderson, Odden, Farrar, Fuhrman, Davis and Huddle (1987) and Berman et al. (1984) provide some insight about how this implementation process should proceed.

Specifically, what is needed is research about the implementation process for state-initiated reform in secondary schools. In this context, states typically follow a "top-down, content-oriented" strategy where state level leaders are active in prescribing the general content of the reform and work with districts and schools to implement the change, or a bottom-up, process-oriented" strategy where states prescribe the decision-making process which local schools are to use in designing and implementing the locally-defined reform. Marsh and Bowman (1988) provide an expansion of the "top-down" and "bottom-up" distinction and have compared these two strategies in terms of typical content, implementation processes and outcomes.

Purpose

This paper focuses on the implementation of state-initiated reform in secondary schools and the impact of that process on several outcomes: student academic achievement and the capacity of the organization to carry out on-going reform. This paper is part of a broad study of secondary school reform in California conducted by Odden and Marsh (1987a, 1987b, and 1988a). The broad study was the first comprehensive study of how California's recent reform (S.B. 813) legislation helped secondary schools and districts improve. The study examined four areas: 1) how each of the 14 major reform components in S.B. 813 and subsequent State Department of Education initiatives have been implemented and how those elements have been integrated into both school and district visions of improvement; 2) how each school/district has structured and managed the implementation of that vision ; 3) how curriculum, students, teachers, administrators and schools as a social organization (including the norms and values of the school culture) changed; and 4) how state policies and programs have helped, hindered or been unimportant in these local secondary school improvement processes. The study also examined the operation of four special needs, student programs -- remedial, compensatory, limited-English proficient and at-risk of dropping out -- and how these programs were or were not integrated with the overall improvement initiatives.

The research questions for this paper are:

1) What were the key local factors associated with successful implementation of the state-initiated secondary school reform in California ?

2) What was the relationship of these implementation factors to the impact of the reform on student achievement and organizational capacity outcomes?

The School Reform Approach

The recent state-initiated reform was based on state legislation (California Senate Bill 813) passed in 1983. This legislation contained over 80 educational policies and programs ranging from curriculum and instruction reform to revised financial structures, including incentives for longer school days and years. The legislation increased high school graduation requirements to 3 years of English, 2 years of mathematics, 2 years of science, 3 years of social studies, 2 years of physical education, and 1 year of either a foreign language or fine arts. The legislation required the State Department of Education to develop model curriculum standards for these subject areas and mandated local districts to compare their curriculum to the model standards. The Department also developed new criteria for textbook selection that included more substantive in-depth content, increased emphasis on thinking and problem-solving and more attention to controversial and ethical issues. The legislation also created a tenth grade counseling program designed to insure that sophomores were counseled to enroll in an academic program that would lead to graduation. Stronger district and school homework policies were also mandated.

The reform specifically strengthened the alignment between local curriculum and the state testing program known as the California Assessment Program (CAP). At the state level, CAP was linked more directly to state-developed model curriculum standards. The test was also revised by expanding subjects assessed to include reading, mathematics, social studies and science, and emphasizing problem-solving and applications rather than only basic skills and knowledge.

Methodology

Sample. Odden and Marsh (1987) conducted a study of the SB 813 reforms in secondary schools using a case survey approach. The study utilized a purposive sample designed to include a small number of schools which had made considerable progress in implementing the Senate Bill 813 reform especially in terms of an increase in academic focus for the school. Perennially high performing schools were excluded from consideration.

The sample was identified in three stages: a) nomination by regional education leaders who identified the schools as having made considerable improvement since 1983, b) confirmation that student enrollment in academically challenging courses had increased in the last four years, and c) selection of schools that represented the geographic and ethnic

distribution of the state. Seventeen secondary schools were selected -- 12 high schools, and 5 junior/middle schools that were in the same districts as the high schools.

Data Collection Approach. Data collection took place over one academic year and focused on: 1) the content of the local reform effort, 2) the local implementation process, and 3) the impact of the reform. Multiple rounds of data collection were used during the year; each emphasized one of the three areas described above. Data collectors received four days of training that included socialization to the conceptual framework for the study, data collection techniques, procedures for case study write-ups and logistical arrangements. Data collectors then were on-site approximately 11 days to observe, interview, and examine documents using structured data collection guides. Data collected from teachers, department chairs and other lead teachers, site and district administrators.

Following each of the three rounds of data collection, case reports were prepared around specific factors and the relationship of factors within the site. In addition, meetings with data collectors were held to increase the comparability and quality of the case studies, and to develop tentative findings.

Instrumentation. We developed a conceptual framework for the implementation process drawing primarily on the policy implementation literature and the local change literature, especially the Huberman and Miles (1984) research. Huberman and Miles (1984) portray the implementation process as a "causal network" of factors represented in a flow chart of influences over time. In addition to tracking the local process of implementation, the conceptual framework had to link state policy initiatives and state influence to local implementation processes. Our conceptual framework is depicted as a schematic in Figure 1 and is discussed further in Odden and Marsh (1988b).

Insert Figure 1 about here

For each of the 26 implementation variables in the framework, we developed a set of questions which each data collector used in the data collection process. in addition, each data collector provided a holistic description of the interaction of the variables and their interaction with other factors at the site.

A range of outcome data were collected including student performance outcomes, outcomes for teachers and administrators, outcomes for the curriculum program and outcomes for the culture and other aspects of the school as a social organization. On a scale of 0 to 10, researchers provided a ranking for 1982, the year before reform, and for 1987,

four years after the reform. The difference indicated the amount of change for the variable. On a score from 0 to 6, researchers also indicated the degree to which SB 813 contributed to the change, with a 3 indicating no SB 813 impact, a score below 3 indicating a negative impact and a score above 3 indicating a positive impact. In addition, gains in student achievement were calculated for each school over the same four year period. Student achievement was a combination of reading and math schoolwide gains as assessed by the California Assessment Program (CAP) test.

For purposes of this paper, only two major outcomes are reported: student achievement gain and organizational capacity to continue to improve. Student achievement gain was based exclusively on 12th grade CAP score gains in reading and math combined. Consequently, these outcomes are reported only for the 12 high schools in the study. Organizational capacity for making on-going improvements was a variable that aggregated information about site and district administrators as well as about school climate.

For administrators, researchers provided ratings on:

- district administrators' ability to develop and educational vision
- site administrators' ability to develop an educational vision
- site administrators' ability to manage a complex, educational change process
- site administrators' ability to manage revised curriculum and instruction programs (within a traditional, academically-focused school).
- site administrators' clinical supervision skills
- site administrators' ability to manage curriculum change focused on higher order thinking skills, communication skills and new instructional approaches.

For school climate, researchers provided ratings on:

- a shared sense of the school's vision among teachers and administrators
- collegiality and mutual trust among and between teachers and administrators
- the amount of teacher talk about teaching and learning
- norm of "continuous improvement"

Scores on each of these specific variables were not weighted when combined to form the organizational capacity variable.

Data Analysis. The analysis of the data was pursued in two primary ways: 1) identifying tentative themes in the analytic meetings which then were confirmed in the subsequent analysis of case studies; and 2) conducting inductive analysis of the case studies themselves. Within the analytic meetings, group process procedures were used to identify tentative themes in the findings. These themes were expanded in subsequent analytic memos in several several ways: a) memos written by the core team to capture and extend the ideas generated in the meetings, and b) memos written by individual data collectors about their specific sites in relation to the ideas developed in the analytic metings.

The inductive analysis of the case survey material took place in several phases following procedures by Miles and Huberman (1984). For this paper, the case study material consisted of a) local implementation factors and approaches discussed first individually by each factor and then by the gestalt of these factors, and b) ratings of outcomes regarding school climate, administrative practice, teacher practice and student accomplishment. Because the case study material was well organized and labeled, no within site analysis was needed prior to commencing the cross-site analysis.

In the first phase of the cross-site analysis, extensive low inference descriptive information was assembled using the same descriptors for each site. Sites appeared as the columns of the display and were ordered by size of district. The steps in preparing these charts included generating the descriptors, summarizing the information for each site using these descriptors, and confirming this analysis first by a second analyst and then by the site researcher. The second phase of the analysis consisted of reducing the descriptive information to a high inference rating (such as high, moderate, low). For example, a high inference rating was prepared for each of the implementation factors identified in the conceptual framework.

The final phase of the analysis began by clustering sites according to their ratings or performance on the two selected outcomes: student achievement and organizational capacity. For example, schools were clustered according to their gains on reading and math achievement as assessed by their CAP score differences between 1983 and 1987. Next, the high-inference ratings of the implementation process (from the second phase of the analysis) were displayed for each of the schools in each of the clusters. Finally, the charts were analyzed to identify implementation antecedents related to: a) CAP gain in schools, and b) organizational capacity gain (the combination of school climate and administrative capacity gain).

Findings

The Local Implementation Process

This section summarizes the pattern of implementation found for each of the variables portrayed in Figure 1, the conceptual framework of implementation processes for the study. Table 1 shows a high inference rating (high, moderate, low) for each implementation factor for each site.

Insert Table 1 about here

District and School Vision. Successful local education reform implementation had several important themes in sample districts. First, district leaders transformed the state technical core of curriculum and instructional elements into integrated, district visions of reform. District leaders used the state curriculum and instructional elements because they believed that these represented important and substantively sound content. They also felt ownership of the reform process because they had initiated at least some action before SB 813. Further, district leaders tailored the state reform to local needs and priorities without destroying its essence. The content of the resulting local vision was a much more integrated, substantively rigorous, technical core of curriculum and instruction than districts had prior to 1983, and included a greater academic orientation than previously had been the case. District leadership, in other words, was important. District leaders set the reform vision for the sample districts.

The second theme is that the new district academically oriented and cognitively demanding curriculum was balanced at the site by a complementary school vision that focused on climate and often emphasized concern for students, self-esteem, teacher collegiality, and social responsibility. The school vision often fit the demographic or local school environment and made the more academically demanding district program possible to implement. This finding fits with the strong role of school climate in other effective secondary school research.

District Commitment and Leadership. Successful launching of local implementation also needed overt commitment of district leaders. This commitment took several forms, such as articulating new directions, translating vision into district policy, providing district resources to support new directions, and continually communicating this direction to others in the district and the community.

Implementation management. All sites used cross-role teams to varying degrees to assist with the planning and/or implementation of the reforms. Cross-role teams are committees of teachers, department heads, site administrators and central office staff that plan, coordinate and even help manage implementation activities. Yet only two sites were seen as using cross-role teams to a high degree. In these instances, the cross-role teaming was highly organized, covered many dimensions of the reform and were powerful mechanisms for coordinating the implementation process. At the other sites, the cross-role teams were less adequately organized or were too specialized on just a few dimensions of the reform.

Cross-role teams typically used existing structures such as departments and department meetings, principal advisory committees, district curriculum/textbook

committees, superintendent cabinets, etc. The role of these groups clearly evolved in a positive way after S.B. 813 was passed in 1983. Initially, these groups concentrated on the logistical, problem-solving functions needed to implement higher graduation requirements and to re-establish academic courses in schools. More recently, the teams have begun to integrate staff development with curriculum implementation, and other dimensions of reform (such as tests and curriculum). As the focus evolved, team members clearly became more sophisticated about managing change and incorporating new curriculum and/or instructional directions into the local reform program.

The cross-role teams were able to blend top-down initiation of the reform direction with bottom-up participation in developing and implementing the programs. In most cases, the cross-role teams built upon rather than hindered the district reform agenda. The teams also were able to integrate the supportive school vision with the harder-edged academic press promoted by the state and many districts. For example, teams of teachers in one district used summer institutes to develop new curriculum guides in response to a district mandate that included upgraded curriculum for each content area. The district was able to set a comprehensive reform direction while teachers were able to participate in creating the actual program and in getting the program implemented in classrooms.

Compared to the use of cross-role teams, written plans for coordinating implementation were used less often used, were used focused on narrower dimensions of the reform, and were found at the district rather than the school level. A district staff development office might have had excellent plans reflecting a sophisticated implementation strategy. But, a school rarely had a long-term viable implementation plan. The most advanced written plans were district visions and goal statements. In short, statements of vision and reform content were more reflected in written form than were the implementation plans linking district and school actions to get these reforms actually implemented in classrooms.

Initial training. All schools in the study provided initial training for teachers and administrators as part of their implementation strategy. Administrator training typically included instructional leadership and clinical supervision skills. In approximately half of the districts, administrators learned clinical teaching which often featured some version of Madeline Hunter's model of instruction prior to learning the clinical supervision procedures prescribed by the district. Training typically was provided by the district and included excellent upfront workshops on how to supervise teachers using district procedures.

To a lesser extent, districts provided site administrators with skills in needs assessment and school improvement management. While districts expected site administrators to become instructional leaders, training for this component was often less

intense and more fragmented. District pressure on site administrators led to numerous examples of increased site management of the implementation process, but this improvement tended not to derive from high quality initial training in these areas.

Teachers also received initial training. Many study schools provided teachers with single session overviews of parts of the reform. Several schools extended this training into systematic, longterm and intense training for all teachers on such topics as clinical instruction. However, many aspects of the early phase of the reform effort did not require extensive teacher training in new techniques so that the training provided, often in traditional skills such as direct instruction, was often sufficient to help teacher understand reform directions.

Lead teachers such as mentors, department chairs and site testing coordinators received much more extensive initial training both about the content of the reform and the implementation processes needed to bring it about. As with the use of the cross-role teams, the sophistication of the initial training improved over the years since 1983. Training focused primarily on district-defined clinical teaching and later on the process of assisting other adults. More recently, initial training was expanded to include the link between new curriculum directions and instructional skills which teachers will need to become successful teaching content-based thinking and problem solving skills.

Lead teachers also received limited training in the process of implementing change including cross-role teaming. However, like improvements made by site administrators, the improvements made by teachers in this area were more by trial and error, or by observing role models than by formal training per se.

Curriculum development. Generally, district-wide curriculum centralization was increased, as was curriculum uniformity. The curriculum change process was district driven and"top-down" in most districts. The result was an impressive amount of curriculum revision.

All schools except one rural northern school carried out curriculum development in mathematics, science and English. The new curriculum represented renewed vigor in the academic focus of the school and was not just relabeling of watered-down courses. Most schools in the study also developed instructional materials that supported reading and/or writing across the curriculum, made extensive use of the Cal writing and Cal math programs as sources of instructional ideas, and trained leaders for the implementation of these changes. Most schools also were revising courses or units for English as a second language and were working to help LEP students transition to the regular curriculum.

Most study schools developed or adopted programs that were designed to improve student test scores on the CAP test. These programs had been implemented in the last

several years and already had shifted from a focus on "test-taking skills" to a focus on the content of the test and a desire (not often in practice as yet) to realign "regular" courses so that they teach the CAP skills more directly.

Efforts to improve student performance in CAP were often the result of an evolving view of the significance of the CAP results themselves. In the first several years following the passage of S.B. 813, schools typically viewed CAP results as the function of student "home environment" and public airing of CAP results as, at best, a necessary political maneuver. Many study schools now have shifted towards viewing CAP results as an important indicator of student learning; preparing students to do well on the exam is seen as a valid curriculum focus rather than just an external political necessity. While use of CAP test results is still not handled with great sophistication at most school sites, the revised ways that students are prepared for the test is impressive, especially in light of the forthcoming improvements in the 12th grade CAP test itself.

More than half of the districts study had developed materials that reflect a qualitative change in the curriculum, i.e., greater content depth, enriched content, higher order thinking or critical thinking skills. However, this attention was only a beginning and did not reflect major change in classroom practice. There is, however, clear evidence of increased attention and effort to this new type of curriculum and evidence that the 8th grade CAP test is stimulating considerable curriculum development activity in this direction.

All schools were involved in increased curriculum alignment activity. Activities most frequently involved aligning courses with state Model Curriculum Standards, with textbooks and with tests. The results showed considerable increase in the sophistication of the curriculum alignment. Even so, the quality of the actual alignment was reflected mainly in district curriculum guides and the shift in the curriculum toward new directions will mean that the alignment will need to be less mechanistic, more thoughtful, and include more work on classroom implementation.

Paralleling the shift toward new directions and the alignment of curriculum, texts, and tests, was the evolving set of implementation strategies to get these changes actually "in place." Staff development was increasingly being combined with curriculum development. The view was that curriculum development and staff development were strongly linked, that new curriculum needed extra staff development in order to penetrate the classroom. While staff development frequently lacked extensive ongoing follow-up, it was being re-oriented towards this direction.

Ongoing administrative leadership. Many schools were rated "high" on school and district administrative commitment to reform policies and practices. All sites had administrators who demonstrated symbolic commitment to reform policies and practices,

including such things as knowing the program of the district, appearing at training sessions, allocating necessary resources and insisting on program continuation. Almost all sites had administrators who gave technical commitment to the reform effort by participating in initial and ongoing training sessions, giving direct assistance to teachers, and budgeting funds for program continuation. This practice was missing at a large urban high school where site management was very difficult. Many site administrators also were perceived as curriculum and instructional specialists and/or change facilitators. These persons showed leadership through supportive actions, supported other facilitators of the reform effort, and made program-supportive decisions.

Most site administrators also were strong at providing administrative pressure to implement the reforms. This pressure was felt at most sites in the study both in the early stages of implementation and in the later stages. Moreover, most administrators monitored reform efforts at the site. Monitoring for implementation focused on program process, program fidelity, and staff concerns at most sites; monitoring for evaluation purposes happened at only a few sites. Overall ratings of ongoing administrator pressure on staff to implement the reforms were quite high as were ratings of the monitoring practices of administrators.

Program latitude and fidelity. Fidelity refers to whether the program as implemented mirrored the program as designed, or envisioned. Latitude refers to the leeway schools had to downsize or change the program as they worked on implementation. Some schools implemented reforms using high fidelity; for these schools, there was little school latitude between the designed and the implemented program. Other schools had greater latitude, or leeway, to revise the reform as they implemented it. The majority of schools used a mixture of high and low latitude variation between design and implemented program. Schools had no latitude for implementing increased high school graduation requirements because it was easy to specify the change and because the change was more a matter of finances and determination than of building new curriculum or instructional strategies.

Low latitude implementation typically was accompanied by considerable district-generated pressure to implement the program as designed, and by a coherent district vision of the reform content. The district vision could have been broad and sophisticated, but more typically was somewhat focused and limited in scope. The size of the district was not related to the extent of latitude provided to sites. Large, middle-size, and small districts were as likely to have low latitude as high latitude implementation, but for different reasons. Large districts typically had a broader vision; the "implementation latitude" issue was whether the district could provide sufficient pressure and assistance to "enforce" this

vision in individual schools. For smaller districts, the "implementation latitude" issue was whether there was sufficient centralized leadership to generate a centralized reform momentum and direction so that low latitude implementation was possible.

Some perspective is needed in characterizing situations where "wider" latitude was used in implementing parts of the reform. Because reform was "in the air," there was a spirit of pursuing reform even when it was generated and implemented in a decentralized fashion. Schools in the study, which were characterized as following wide latitude, had more consensus about program directions than did most secondary schools in California 10 years ago.

The reasons for using wider latitude during implementation were quite varied. In some cases, the school or the district needed to invent the program because they were not aware of existing quality versions of such a program that would work in their district or site. This was especially true for the Mentor Teacher program. Similarly, weak assistance or dissemination strategies forced local sites to "re-invent" the program. In other cases, decentralized or weak district leadership or a philosophy that teachers should be autonomous limited the viability of coordinated implementation of the reform. Because of these multiple reasons for having wider latitude in implementation, it is understandable that the authority for making changes and the timing of adoptions varied considerably.

Several important trends emerged, however. There were many cases where modifying reform components happened in creative and understandable phases. In the first phase, a general sense of direction was created either by district or by site leadership. In this phase, the program was "launched" even though it was not entirely clear what the program really was. In the second phase, sites developed variations of the program and made modifications so as to improve the program. In this phase, assistance was often clumsy because no one knew exactly what to do. District leaders often learned from sites about what "worked" and couples this information with their own evolving idea of what the program should be. In the final phase, a common view of the program and how to make it work evolved, and disseminated, with centralized pressure, become the district program. The evolution of Mentor Teacher programs, from allowing teachers autonomously to develop curriculum and help other teachers, to being central elements for implementing the new state curriculum frameworks is a good example.

A second trend concerns the extent of "down-sizing" of the reform components. "Down-sizing" refers to the pattern where a substantial, robust program is reduced to a more limited and less radical change as it is implemented. While over half of the sites "down-sized" parts of the reform during implementation, important examples of "up-sizing" also occurred. In these latter cases, a slogan or vague reform component was

made more robust and was integrated with other parts of the reform effort during implementation. Examples include schools that "up-sized" curriculum reform to include analytic thinking and problem solving skills and the new state curriculum framework. At almost all the schools in the study, the reform in general became more robust and integrated over the last several years.

On-going assistance. On-going assistance was one of the key factors related to successful local reforms implementation. On-going assistance became increasingly important as the emphasis in the reform progresses from just higher graduation requirements and to the revitalizing the traditional academic curriculum, to the newer curriculum directions of thinking and problem solving. The extent and quality of on-going assistance was minimal. It was sufficient to implement the early phases of reform but will be insufficient to implement the more demanding, newer phases of reform.

All but two schools provided administrators and teachers with some type of on-going content assistance related to S.B. 813 reforms. For administrators, the assistance often focused on clinical supervision, teacher evaluation and classroom management. The assistance included training and was carefully structured and scheduled. Only three schools provided administrators with at least four days of sustained help over the course of the implementation process. Consequently, the intensity of assistance was not high for administrators at most of the schools

For teachers, on-going assistance on clinical teaching, classroom management and general pedagogy often was provided. Some teachers also received on-going assistance in mathematics, science, English, social studies or CAP preparation or testing. As with administrators, most teachers received less than 4 days of on-going assistance over a year. Thus, the intensity of on-going assistance was not high for teachers either. Teachers receiving assistance, though, often had training that was structured and scheduled.

Half the schools in the study used individuals external to the school to provide on-going assistance. Typically, external assistors were used in the initial implementation phase and provided training for internal trainers. Most schools using eternal assistors reported a close fit between external and internal assistance efforts. Conversely, all schools also used central office personnel to provide assistance, and this help included both symbolic and technical types of support.

At the school site, the principal was an active provider of assistance. Even though conventional wisdom holds that secondary schools are too specialized for principals to provide technical help, secondary principals in these schools were active in providing teachers with technical assistance. Typically, this assistance was more facilitative and logistical than substantive but, at most sites, the principal and/or other members of the

school administrative team were very active in providing direct, on-going substantive assistance to teachers. In addition to members of the administrative team, several schools used mentor teachers, department chairs and/or other teacher leaders to provide assistance to teachers.

Teacher effort, mastery of new instructional techniques and commitment. Teacher effort refers to the degree and quality of teacher involvement in the new reform. Effort is needed before mastery of new instructional techniques is obtained. In turn, teacher commitment refers to the teacher's on-going commitment to the reform once the teacher has learned how to do "it."

At all but one high school and at all of the junior high/middle schools in the study, teachers made an active effort to engage in the reform process. At these sites, teachers exhibited both physical and psychological engagement in reform-related activities. Teachers at most of these sites achieved mastery of new instructional strategies needed for the less-demanding dimensions of the reform and worked on program refinements. A high degree of correspondence was found between the extent of teacher efficacy and the extent of mastery obtained. For the more demanding dimensions of the reform, a limited number of teachers achieved mastery. Most teachers, however, were only recently engaging in this type of reform and had not achieved mastery of the new instructional techniques as yet.

All but one of the schools studied had achieved extensive implementation of some aspects of the reform. At these schools, personal and psychological commitment by at least some teachers was present. Further, teachers demonstrated a desire for program expansion at the majority of schools studied; this corroborated the "up-sizing" of the reform effort in many schools. At a majority of schools, institutional commitment was also in evidence. District support for institutionalization of the program was found in most schools, and school-level institutional commitment was found at all schools.

Summary. All schools in the study, except one junior high school, conducted an effective local implementation process. Every school used some form of cross-role teaming (typically involving teachers, department chairs, site administrators and district staff) to coordinate the implementation process. Cross-role teams blended top-down initiation of the reform direction with bottom-up participation in developing and implementing specific programs.

Site administrators and teachers received initial training to carry out the reforms and undertook curriculum development activities. Coupled with extensive administrator leadership, commitment, monitoring and pressure to implement, these initial trainings and

corresponding curriculum development activities were sufficient to implement the early phase of revitalizing the traditional, academically-oriented curriculum.

More substantial changes in curriculum and/or instruction took increased amounts of on-going assistance. For site administrators, this assistance often focused on clinical supervision, teacher evaluation and classroom management strategies. For teachers, this assistance often focused on clinical teaching, classroom management and general pedagogy. For most sites, however, the quality and extent of ongoing assistance was still not sufficient to support the implementation of the even more demanding, newer phases of reform including higher order thinking skills and cooperative learning.

In some cases, the implementation process had high fidelity between the district-defined design and the implemented program, and was successful when accompanied by considerable district-generated pressure to implement the program as designed and by a coherent district vision of the reform content. At other sites, characterized as having low fidelity, implementation was successful when the reform was modified until it "worked" and then was implemented with ample assistance, district coordination and pressure.

Almost all sites were able to generate teacher engagement in the implementation process. Teachers at most sites also had achieved skill mastery of the less-demanding dimensions of the reform and worked on program refinements. For the more demanding dimensions of the reform, a more limited number of teachers achieved skill mastery; most teachers, however, were only recently engaging in this type of reform and had not yet achieved skill mastery.

How Important Outcomes Were Produced

The story of CAP score improvements. Table 2 presents implementation process factors related to CAP score gains.

Table 2 about here

CAP gains were calculated for each high school: the gains were the difference between the December 1986 and December 1983 12th grade CAP scores. While the average gain for all schools exceeded the statewide average, three patterns of CAP score gain were identified: (1) high CAP gain schools that had sizeable gains in both reading and mathematics; (2) low CAP gain schools that had smaller gains in both reading and mathematics (but still about the same as the statewide average); and (3) mixed schools for which either reading or mathematics gains, but not both, were sizeable (Table 2).

Patterns of high CAP or low CAP gain were not related to the size of the district nor to the ethnic composition of the student body. Similarly, CAP score gains were not related

to whether the school's 1983 CAP scores were high or low with respect to the overall statewide average. High CAP gain schools had gains dramatically better than the statewide average gains even though they were demographically typical of all schools in the state. What then explains the pattern of CAP score gain?

High CAP gain high school had implementation patterns that were considerably different from low CAP gain schools (See Table 2). High CAP gain schools were in districts where the district vision of reform was clear and consistent. Districts with high CAP gain schools were highly committed to education reform, especially to improving basic skills, and were strong in communicating this commitment to schools.

High CAP gain schools were much more active than low CAP Gain schools in managing implementation reform. High gain schools were more active in using cross-role teams and in using implementation plans. Implementation coordination between the school and the district and among the departments in the schools were much stronger in high gain than in low gain schools.

Use of initial training was substantially greater in most of the high gain schools. Where initial training was not extensive, administrator pressure and monitoring was especially active. Initial training often took the form of orientation and socialization to a district or school point of view about the program. Ongoing assistance, both from the district and leaders at the school, also was much greater in high gain schools.

Curriculum development at high gain schools was often extensive but was qualitatively not greatly different from the previous curriculum at the school. The pattern in low gain schools was very similar--neither type of school had already developed curriculum that was reflective of the new phases of reform. Both high and low gain schools, however, were active in aligning curriculum with texts, model curriculum standards and CAP tests.

On-going administrative commitment and leadership were uniformly strong in high gain schools. Conversely, low gain schools had low commitment and leadership except in the one special case of a one school district in rural northern California. Administrative pressure and monitoring was very high in all but one of the high gain schools. In that school, administrative commitment and leadership were very high even though pressure and monitoring was not extensive. In low gain schools, administrative pressure and monitoring were uniformly very low.

All high gain schools were tightly coupled with their districts and most had change that was top-down initiated. Even so, the extent of program fidelity (low latitude) to the district design varied across the schools. Some high gain schools exercised wide latitude in implementing their programs while other had much lower latitude in implementing the

program. In low gain schools, the school was either tightly coupled to the district and the direction of change was bottom-up or not existent, or the school was loosely coupled to the district but the change was top-down or mutual. Program latitude was often extensive in low gain schools. In every case, low gain schools had awkward patterns of school/district coupling, direction of change, and program latitude during implementation.

Teacher effort, skill mastery and commitment at high gain schools was dramatically different than at low gain schools. Two of the four high gain schools had consistently high ratings for teacher effort, skill mastery and commitment. The two other schools had modest ratings for teacher effort, skill mastery and commitment but had strong ratings for many of the other implementation factors, especially for site leadership and commitment. In turn, low gain schools had consistently modest levels of teacher effort, skill mastery, and commitment.

Finally, three of the four high gain schools put a considerable emphasis on CAP scores and had CAP preparation programs for students. All high gain schools also had strong curriculum and programs in mathematics and reading. Low gains schools typically had a low or modest emphasis on CAP and had a mixed picture in terms of mathematics and reading curriculum.

The story of improved organizational capacity. Organizational capacity for making further reform was defined as a combination of improvements in school climate and administrative practice. All of the schools experienced an increased capacity to carry out educational quality improvement as a result of their involvement with the reform effort.

For the analysis reported here, high schools were rank-ordered by gains in school climate and administrative practices, and were clustered into high, moderate and low gain schools for this analysis. Table 3 presents the ratings for each implementation factor for each school; Table 4 presents the average ratings for high, moderate and low gain schools after ratings for each implementation factor had been averaged across all sites in each cluster of schools.

Tables 3 and 4 about here

In calculating the mean, a site rating of "high" was given a 3, a rating of "moderate" was given a 2, and a rating of "low" was given a 1.

Schools with high organizational gain had better implementation management. These schools were dramatically better at using cross-role teams (i.e.) better at involving teachers in implementation) and also had better implementation plans. The use of initial training at high organizational schools was not different from other schools. Teacher

training in both content and pedagogy was not different in high and low organizational CAP gain schools but administrative training was slightly higher in the high gain schools. High gain schools, however, had much more on-going assistance both from persons within and from outside the district.

High organizational capacity gain schools were similar to other schools in having a moderate amount of curriculum development, including only a minimal amount of qualitatively different curriculum. Like other schools, high gain schools had a considerable amount of curriculum alignment. In terms of administrative leadership, however, high organizational capacity gain schools were quite different from other schools. High gain schools had considerable on-going administrative commitment and leadership in implementing the reform. Administrative pressure and monitoring were somewhat greater at high gain schools but not intensive for either factor. High gain schools also had more latitude in implementing the reforms with strong school/district coupling and a direction of change that was consistent. In general, curriculum development was not different in high gain schools, but there was stronger administrative leadership, a greater amount of on-going assistance, tight school/district coupling, and top-down direction of change.

At the teacher level, it was hard to differentiate high, moderate and low organizational capacity gain schools. Teacher effort was about the same at high gain schools as at other schools. Skill mastery gains, however, favored low gain schools largely because two of the four high gain schools implemented reforms where skill mastery was not a critical issue. In most of the high organizational capacity gain schools, teacher commitment to the reform was high, but this also was true of the low gain schools.

Discussion

The paper supports five important conclusions about the process by which state-initiated reform is implemented and is effective in secondary schools. First, there is a strong and positive relationship between the pattern of implementation and the impact of the reform on student achievement and the capacity of the district/school to make on-going improvements. An identified pattern of district and school implementation factors lead to greater gain in student achievement in reading and math as well as greater gain in organizational capacity for making on-going change.

Second, a highly similar implementation process was associated with gains for both outcomes. This conclusion differs from the findings of Berman et al. (1984) which found that one pattern of implementation was related to high gains in student outcomes while another pattern was related to high gains in organizational capacity. The apparent

discrepancy between this study and the Berman study lies in the different types of comprehensive reforms undertaken. Marsh and Bowman (1988) found that Berman was focusing on state-initiated "bottom-up, process-focused" reform where the content of the reform was designed by a local decision-making group at the school level. This study, however, focused on "top-down, content-focused" reform.

Third, "top-down, content-focused" reform, as conceptualized by Marsh and Bowman (1988) can work for secondary schools. The Odden and Marsh (1988) study, however, examined "top-down, content-oriented" reform only within the conditions of the S.B. 813 reform. In an era where the emphasis in secondary school reform includes concern about new curriculum directions (such as higher order thinking, new instructional strategies (such as cooperative learning), a revised teaching professional culture and decision-making in school settings, and restructured schools, it is not clear how generalizable the conclusion is that "top-down, content-focused reform works" will actually be.

The fact that the reform worked under the S.B. 813 conditions, however, helps to underscore the fourth conclusion that state-initiated "top-down, content-focused" reform in secondary schools is successful when: a) the content of the reform fits with the priorities of the district, b) districts and schools are able to transform the reform into their local agenda and context, and c) key features of the implementation process described in this paper are followed. This conclusion parallels the conclusion from a related study that compared "top-down, content-oriented reform" using the S.B. 813 case studies with "bottom-up, process-oriented" reform using the Berman et al. case studies. In this comparative study, Marsh and Bowman (1988) found that "top-down, content-oriented reform" is effective when: a) the content of the reform is targeted at all students and constitutes a toughening of existing academic programs, b) the local implementation process is stimulated by external pressure, especially in the form of testing, c) the content of the reform extends across the school and includes alignment of curriculum, textbooks, teaching strategies and testing, d) the roles of state, district and school are complementary, e) the local decision-making process complements rather than competes with the existing structures, f) the reform fits within the school and district, and g) key players are able to institutionalize their efforts within the regular program of the school.

Finally, it is important to conclude that the implementation process is best described as a "causal net" of factors rather than as a set of individual and discrete factors. For the analysis linking implementation process to outcomes, it was important for both the student achievement and the organizational capacity analysis to describe the impact of a set of interacting factoring rather than to describe single factors that were uniquely and powerfully

linked to outcomes. The value of the "causal net" is both in capturing the pattern of implementation in the study but also in guiding practitioners who wish to take advantage of the findings to enhance implementation of reform in secondary schools.

References

Anderson, B., Odden, A., Farrar, E., Fuhrman, S., Davis, A., Huddle, E., Armstrong, J., & Flakus-Mosqueda, P. (1987). State strategies to support local school improvement. Knowledge: Creation, Diffusion, Utilization, 9 (1), 42-85.

Berman, P., Gjelten, T., Csezak, K., Izu, J., & Marsh, D. (1984, April). Improving school improvement: An independent evaluation of the California School Improvement Program, Vol. 2. Berkeley, CA: Berman, Weiler Associates.

Boyer, E.L. (1983). High school. New York: Harper and Row.

Crandall, D., Eiseman, J., & Louis, K.S. (1985). Strategic planning issues that bear on the success of school improvement efforts. Educational Administration Quarterly, 22 (3), 21-53.

Farrar, E., Neufeld, B., & Miles, M. (1983). Review of effective schools programs. Vol. III. Effective schools programs in high schools: Implications for policy, practice and research. Cambridge, MA: Huron Institute.

Farrar, E. (1987, April). The role of leadership at the school and district level. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Fullan, M. (1982). The meaning of educational change. New York: Teachers College Press.

Fullan, M. (1985). Change processes and strategies at the local level. The Elementary School Journal, 85 (3), 391-421.

Goodlad, J.I. (1984). A place called school. New York: McGraw-Hill.

Goodlad, J.I. (Ed.). (1987). The ecology of school renewal. Chicago: The National Society for the Study of Education.

Hall, G.E., Hord, S.M., Guzman, F.M., Huling-Austin, L., Rutherford, W.L., & Stiegelbauer, S.M. (1984, April). The improvement process in high schools: Form, function, and a few surprises. Paper presented at the annual meeting of the American Educational Research Association, Reprinted as Report 3188, Research and Development Center for Teacher Education. Austin, TX: University of Texas.

Huberman, A.M. & Miles, M. (1984). Innovation up close: How school improvement works. New York: Plenum.

Leithwood, K.A., & Batcher, E. (1987). A review of research concerning characteristics of exemplary secondary schools. A working paper prepared as part of the research project Student Retention and Transition. Ontario: Ministry of Education.

Louis, K.S. (1986a, April). A survey of effective schools programs in urban high schools. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Louis, K.S. (1986b). Reforming secondary schools: A critique and an agenda for administrators. Educational Leadership, 33-36.

Louis, K.S., & Cipollone, A. (1987, April). Causal model of the change process. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

McLaughlin, M.W., & Marsh, D.D. (1978). Staff development and school change. Teachers College Record, 80 (1), 69-94.

McLaughlin, M.W. (1987, Summer). Learning from experience: Lessions from policy implementation. Educational Evaluation and Policy Analysis, 9 (2), 171-178.

Marsh, D.D. (1987, April). Curriculum change strategies in secondary schools: An extension of the California school improvement study. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Marsh, D.D., & Bowman, G.A. (1988 April). Building better secondary schools: A comparison of school improvement and school reform strategies in California. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.

Miles, M.B., & Huberman, A.M. (1984). Qualitative data analysis: A sourcebook of new methods. Newbury Park, CA: Sage.

Miles, M.B. (1986, April). Improving the urban high school: Some preliminary news from five cases. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

National Commission on Excellence in Education. (1983). A Nation at Risk. Washington, DC: Government Printing Office.

Odden, A.R., & Marsh, D.D. (1987). How state education reform can improve secondary schools. Berkeley, CA: Policy Analysis for California Education (PACE), School of Education, University of California.

Odden, A.R., & Marsh, D.D. (1988). How state education reform can improve secondary schools. Phi Delta Kappan.

Odden, A.R. & Marsh, D.D. (in press). State education reform implementation: A framework for analysis. In J. Hannaway & R. Crowson (Eds.). Politics of education yearbook, 1988. New York: Taylor and Francis.

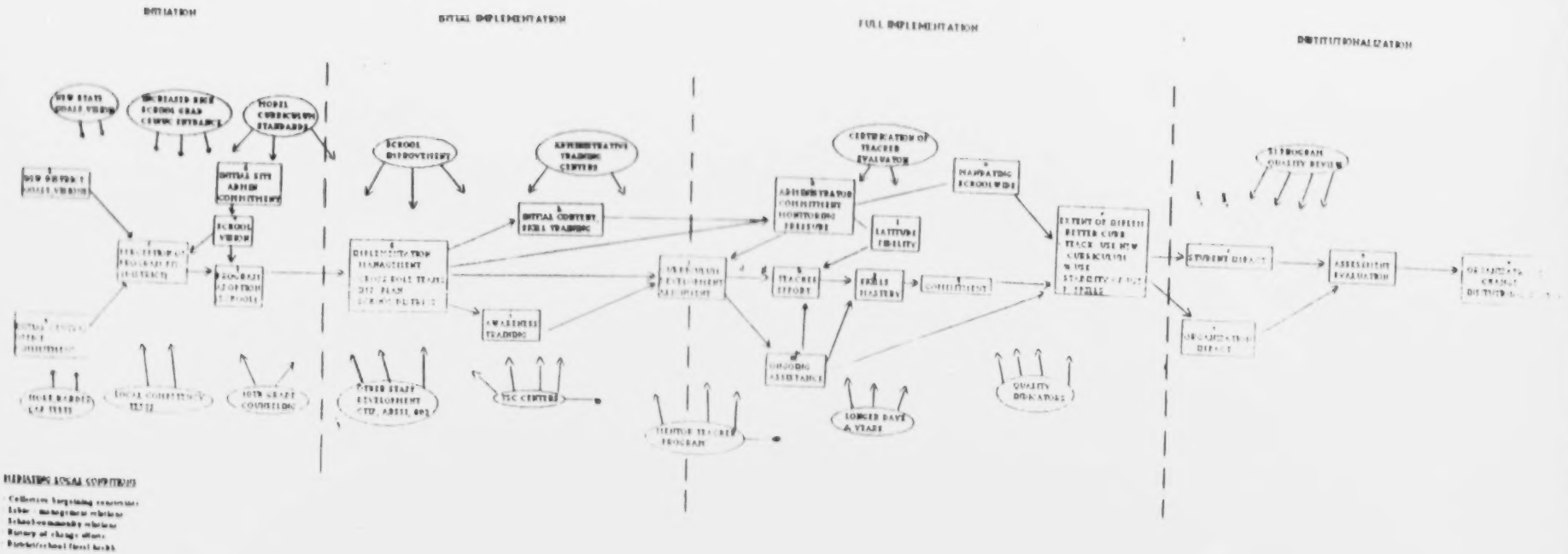
Purkey, S.C., & Smith, M.S. (1985). School reform: The district policy implications of the effective school literature. The Elementary School Journal, 85 (3), 353-389.

Rutherford, W.L., Hord, S.M., Huling-Austin, L., Stiegelbauer, S.M., Murphy, S.C., Putman, S., Hall, G.E., & Muscella, D. (1985, April). Changing the American high school: Descriptions and prescriptions. Paper presented at the annual meeting of the American Educational Research Association, Reprinted as Report 3216 for 3216, Research and Development Center for Teacher Education. Austin, TX: University of Texas.

Sizer, T.R. (1984). Horace's compromise: The dilemma of the American high school. Boston: Houghton Mifflin.

FIGURE 1

CAUSAL NETWORK OF VARIABLES



MEDIATING SOCIAL CONDITIONS

- Collective bargaining contracts
- Labor - management relations
- School-community relations
- History of change efforts
- District/school fiscal health

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TABLE 1 SUMMARY CHART OF EARLY AND FULL IMPLEMENTATION STAGE CAUSAL FACTORS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1				BIG CITY			LARGE DISTRICTS				MEDIAN DISTRICTS				RURAL DISTRICTS		
2				(ADA: 646,599 - 44,613)			(ADA: 28,369 - 26,868)				(ADA: 19,128 - 14,091)				(19,341 - 182)		
3	IMPLEMENTATION STRATEGIES		Capital City HS	LA City HS	SoCal HS		Desert HS	East Bay HS	Orange Co. HS	Peninsula HS	LA Metro HS	Tri-County HS		Buffalo Bobs HS	Central Valley HS	Forest HS	
4																	
5	G: IMPLEMENTATION MANAGEMENT		MODERATE	LOW	LOW		MODERATE	MODERATE	MODERATE	LOW-MOD	HIGH	MODERATE		LOW	HIGH	MODERATE	
6	CROSS ROLE TEAMING		LOW	MODERATE	LOW		HIGH	LOW	HIGH	LOW-MOD	HIGH	MODERATE		LOW	HIGH	LOW	
7	IMPLEMENTATION PLAN		LOW-MOD	LOW	LOW		MODERATE	MODERATE	MODERATE	LOW	HIGH	MODERATE		LOW	HIGH	LOW	
8																	
9	H: INITIAL TRAINING (CONTENT, SKILL...)		LOW	MODERATE	MODERATE		LOW	LOW	MODERATE	MODERATE	HIGH	HIGH		LOW	HIGH	MODERATE	
10	ADMINISTRATOR TRAINING		LOW	MODERATE	LOW		MODERATE	LOW	MODERATE	MODERATE	HIGH	MODERATE		LOW	MODERATE	MODERATE	
11	TEACHER TRAINING		LOW	MODERATE	MODERATE		LOW	LOW	MODERATE	MODERATE	HIGH	HIGH		LOW	MODERATE	MODERATE	
12																	
13	J: CURRICULUM DEVELOPMENT		HIGH	MODERATE	MODERATE		LOW	HIGH	MODERATE	MODERATE	HIGH	MODERATE		LOW	HIGH	HIGH	
14	QUALITATIVE CHANGE		LOW	LOW	LOW		LOW	MODERATE	LOW	LOW	MODERATE	LOW		LOW	LOW-MOD	MODERATE	
15	CURRICULUM ALIGNMENT		HIGH	HIGH	MODERATE		HIGH	HIGH	MODERATE	MODERATE	HIGH	MODERATE		LOW	HIGH	HIGH	
16																	
17	K: ADMINISTRATIVE COMMITMENT		MODERATE	LOW	MODERATE		HIGH	HIGH	HIGH	HIGH	MODERATE	HIGH		LOW	HIGH	HIGH	
18	LEADERSHIP		MODERATE	LOW	MODERATE		HIGH	HIGH	HIGH	MOD - HIGH	MODERATE	HIGH		LOW	HIGH	HIGH	
19	PRESSURE		LOW	LOW	LOW-MOD		LOW	MODERATE	HIGH	MODERATE	HIGH	LOW		LOW	MODERATE	LOW	
20	MONITORING		LOW	LOW	LOW-MOD		LOW	MODERATE	MODERATE	NA	HIGH	LOW		LOW	MODERATE	LOW	
21																	
22	L: PROGRAM LATITUDE		LOW	HIGH	MODERATE		HIGH	LOW	MODERATE	NA	LOW	LOW(S) HIGH		HIGH	MODERATE	LOW	
23	DEGREE OF FIDELITY		MODERATE	MODERATE	MODERATE		LOW	HIGH	MODERATE	NA	HIGH	HIGH; LOW(S)		LOW	MODERATE	HIGH	
24																	
25	M: DISTRICT ONGOING ASSISTANCE		LOW	MODERATE	LOW		LOW	HIGH	MODERATE	NA	HIGH	LOW		MODERATE	MODERATE	MODERATE	
26	SCHOOL ONGOING ASSISTANCE		LOW	MODERATE	LOW		MODERATE	MODERATE	MODERATE	NA	HIGH	LOW		LOW	MODERATE	MODERATE	
27	EXTERNAL LOOSE AGENT		LOW	MODERATE	LOW		HIGH	NOT USED	MODERATE	NA	MODERATE	NOT USED		LOW	NOT USED	NOT USED	
28	INTERNAL LOOSE AGENT		LOW	LOW	LOW		MODERATE	MODERATE	MODERATE	NA	HIGH	MODERATE		LOW	HIGH	MODERATE	
29																	
30	N: TEACHER EFFORT		MIXED	MIXED	MIXED		MIXED	HIGH	MODERATE	NA	HIGH	HIGH		LOW	HIGH	LOW	
31																	
32	P: TEACHER SKILL MASTERY		NA	LOW-MOD	MOD		LOW	HIGH	LOW	NA	HIGH	MODERATE		LOW	HIGH	LOW-MOD	
33																	
34	Q: TEACHER COMMITMENT		MODERATE	LOW	LOW		HIGH	HIGH	LOW	NA	MODERATE	HIGH		LOW	HIGH	LOW	
35	INSTITUTIONAL COMMITMENT		MODERATE	MODERATE	LOW		HIGH	HIGH	MODERATE	NA	MODERATE	HIGH		LOW	HIGH	MODERATE	
36																	
37	R: EXTENT OF IMPLEMENTATION		MODERATE	MODERATE	NA		HIGH	MODERATE	MODERATE	NA	MOD - HIGH	HIGH		LOW	HIGH	MODERATE	
38	DISTRICT IMPLEMENTATION		MODERATE	MODERATE	NA		HIGH	MODERATE	MODERATE	NA	MOD - HIGH	HIGH		LOW	HIGH	MODERATE	
39	SCHOOL IMPLEMENTATION		MODERATE	MODERATE	NA		HIGH	MODERATE	MODERATE	NA	MOD - HIGH	HIGH		LOW	HIGH	MODERATE	
40																	
41	OTHER COMPARATIVE FIELDS																
42	BP PROGRAM		NO	NO	YES		YES	NO	YES	SOME COURSES	NO	YES		NO	NO	NO	
43	OTHER PROGS (BM, SB, SIP, LEP)			LAALEP			SDE-LEP-CHI	AB 551	SDE-LEP-CHI	PACIFIC GREEN		SDE-LEP-CHI		SDE-LEP-CHI	SDE-LEP-ED	SDE-LEP-BM	SDE-LEP-CHI
44	COURT/VOLUNTARY SITE ORIGINATION		NEW-EA	COURT ORDER	COURT ORDER		VOLUNTARY	REFORM	NEW-SB	COURT ORDER	NEW-SB	NEW-SB		NEW-SB	NEW-SB	NEW-SB	NEW-SB
45	TOP-DOWN OR BOTTOM-UP CHANGE		MUTUAL	TOP-DOWN	MIXED		MIXED	TOP-DOWN	TOP-DOWN	TOP-DOWN	TOP-DOWN	BOTTOM-UP		BOTTOM-UP	MIDDLE-OUT	NA	
46	TIGHTA-CORE/ LOOSE-PERIPHERAL COUPLING		LOOSE	LOOSE	MIXED		MODERATE	TIGHT	TIGHT	TIGHT	TIGHT	LOOSE		LOOSE	LOOSE	TIGHT	
47	DEGREE OF CAP TEST EMPHASIS		LOW	MODERATE	LOW		HIGH	LOW	HIGH	HIGH	HIGH	LOW		LOW	HIGH	HIGH	
48	INCREASED CENTRALIZATION		YES	YES	MODERATE		YES	YES	YES	YES	MODERATE	YES		CONTINUED	YES	MODERATE	
49	OTHER COMMENTS		Dist has a 7yr goals fwd as written; broad; expectation also	Dept Chairs allowed low role in the reform effort	BP area had positive in-house on reform effort		813 reforms were a small piece of a larger plan	Each sch in Pitts. sets own goals to divide up theory plan	Pitts. sets own 2 yr's, & Additional Goal generator for 1998.	The principal's position BP commitment	Dist had 5 yr plan for each school to develop and test, theory	Dist values follow-up activities to be done, more discipline		AB 813 limited flexibility of changes in the budget to plan for reform effort	Availability of supervision & technical assist reform effort	Single site sold w/ many single site departments	
50																	
51																	
52																	
53																	
54																	
55	DATA SOURCE: CAUSAL FACTOR SHEETS, ROUND I/II CASE STUDIES AND OUTCOME REPORTS																
56																	
57																	
58																	
59																	
60																	
61																	
62																	
63																	
64																	
65																	

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TABLE 1 SUMMARY CHART OF EARLY AND FULL IMPLEMENTATION STAGE CAUSAL FACTORS

	1	2	4	6	7	8
1		DECISION RULES: HIGH = Most or all component parts implemented.				
2		MOD = At least half of the component parts implemented.				
3		LOW = Less than half of the component parts implemented.				
4		DK = Data collector "DK" not known."				
5		BIG CITY			MIDDLE DISTRICTS	
6		(ADA: 649,889 - 44,619)			(ADA: 39,999 - 15,139)	
7	IMPLEMENTATION STRATEGIES	Combat City #48	LA City #49	SoCal #46	East Bay #45	LA Metro #48
8	G. IMPLEMENTATION MANAGEMENT	MODERATE	HIGH	LOW	LOW	HIGH
9	CROSS ROLE TRAINING	MODERATE	MODERATE	LOW	LOW	HIGH
10	IMPLEMENTATION PLAN	LOW-MOD	HIGH	LOW	LOW	HIGH
11						
12	H. INITIAL TRAINING (CONTENT, SKILL)	LOW	MODERATE	LOW	LOW	HIGH
13	ADMINISTRATOR TRAINING	LOW	MODERATE	LOW	LOW	HIGH
14	TEACHER TRAINING	LOW	MODERATE	LOW	LOW	HIGH
15						
16	J. CURRICULUM DEVELOPMENT	MODERATE	HIGH	HIGH	HIGH	HIGH
17	QUALITATIVE CHANGE	LOW	MODERATE	LOW	MODERATE	HIGH
18	CURRICULUM ALIGNMENT	HIGH	HIGH	MODERATE	HIGH	HIGH
19						
20	K. ADMINISTRATIVE COMMITMENT	LOW	HIGH	MODERATE	MODERATE	HIGH
21	LEADERSHIP	LOW	MODERATE	MODERATE	MODERATE	HIGH
22	PRESSURE	LOW	LOW	LOW-MOD	LOW	HIGH
23	MONITORING	LOW	LOW	LOW-MOD	LOW	HIGH
24						
25	L. PROGRAM LATITUDE	LOW	HIGH	MODERATE	MODERATE	LOW
26	DEGREE OF FIDELITY	MODERATE	LOW	LOW	LOW	HIGH
27						
28	M DISTRICT ONGOING ASSISTANCE	LOW	MODERATE	LOW	MODERATE	HIGH
29	SCHOOL ONGOING ASSISTANCE	LOW	HIGH	LOW	MODERATE	HIGH
30	EXTERNAL LINKING AGENT	LOW	NOT USED	LOW	NOT USED	MODERATE
31	INTERNAL LINKING AGENT	LOW	LOW	LOW		HIGH
32						
33	N. TEACHER EFFORT	MODERATE	HIGH	MODERATE	MODERATE	HIGH
34						
35	P. TEACHER SKILL MASTERY	NA	MODERATE	HIGH	LOW	HIGH
36						
37	Q. TEACHER COMMITMENT	MODERATE	MOD-HIGH	MODERATE	HIGH	HIGH
38	INSTITUTIONAL COMMITMENT	MODERATE	MODERATE	LOW	HIGH	HIGH
39						
40	R. EXTENT OF IMPLEMENTATION	MODERATE	MODERATE	NA	MODERATE	MOD-HIGH
41	DISTRICT IMPLEMENTATION	MODERATE	MODERATE	NA	LOW	MOD-HIGH
42	SCHOOL IMPLEMENTATION	MODERATE	MODERATE	NA	MODERATE	MOD-HIGH
43						
44	OTHER COMPARATIVE FIELDS					
45	SIP PROGRAM	NO	SIP SCHOOL	NO	NO	NO
46	OTHER PROFS (881-89-999 LEP)	AB 581	LEP GATE MAGCH1-581-882		AB 581	NO
47	COURT/VOLUNTARY INTEGRATION	NEITHER	COURT ORDER	COURT ORDER	NEITHER	NEITHER
48	TOP-DOWN OR BOTTOM-UP CHANGE	MUTUAL	TOP-DOWN	MIXED	TOP-DOWN	TOP-DOWN
49	TIGHT & LOOSE (INT-SCHL COUPLING)	LOOSE	LOOSE	MIXED	MIXED	TIGHT
50	DEGREE OF CAP TEST EMPHASIS	HIGH	HIGH	LOW	HIGH	HIGH
51	INCREASED CENTRALIZATION	YES	YES	NO CHANGE	YES	NO CHANGE
52						
53	OTHER COMMENTS	District has a 7yr court order but no written plan	Dual Chain placed has implementation role	Supportive climate for change is salient.	School has developed own timeline most prior.	District has a 5 yr plan but court declared it lost. Improved
54						
55						
56						
57						
58	DATA SOURCE: CAUSAL FACTOR SHEETS, ROLE					
59						
60						
61						
62						
63						
64						
65						

TABLE 2 THE RELATIONSHIP BETWEEN IMPLEMENTATION FACTORS AND CAP GAINS

CAUSAL FACTORS	Orange Co	LA Metro	East Bay	Desert	LA City	Central City	S. Bay	Hawaii
	HIGH CAP GAIN SCHOOLS				LOW CAP GAIN SCHOOLS			
G. IMPLEMENTN MGT	MOD	HIGH	MOD	MOD	LOW	MOD	LOW	MOD
CROSS ROLE TN	HIGH	HIGH	LOW	HIGH	MOD	LOW	LOW	LOW
IMPLEMENTN PLAN	MOD	HIGH	MOD	MOD	LOW	LW-MD	LOW	LOW
H. INITIAL TRAINING	MOD	HIGH	LOW	LOW	MOD	LOW	LOW	MOD
ADM TRAINING	MOD	HIGH	LOW	MOD	MOD	LOW	LOW	MOD
TCHR TRAINING	MOD	HIGH	LOW	LOW	MOD	LOW	LOW	MOD
J. CURR DEVELPMT	MOD	HIGH	HIGH	LOW	MOD	HIGH	LOW	HIGH
QUALITATIVE CHNG	LOW	MOD	MOD	LOW	LOW	LOW	LOW	MOD
CURR ALIGNMENT	MOD	HIGH	HIGH	HIGH	HIGH	HIGH	LOW	HIGH
K. ADM COMMITMENT	HIGH	MOD	HIGH	HIGH	LOW	MOD	LOW	HIGH
LEADERSHIP	HIGH	MOD	HIGH	HIGH	LOW	MOD	LOW	HIGH
PRESSURE	HIGH	HIGH	MOD	LOW	LOW	LOW	LOW	LOW
MONITORING	MOD	HIGH	MOD	LOW	LOW	LOW	LOW	LOW
L. LATITUDE	MOD	LOW	LOW	HIGH	HIGH	LOW	HIGH	LOW
FIDELITY	MOD	HIGH	HIGH	LOW	MOD	MOD	LOW	HIGH
M. DIST ASSISTANCE	MOD	HIGH	HIGH	LOW	MOD	LOW	MOD	MOD
SCH ASSISTANCE	MOD	HIGH	MOD	MOD	MOD	LOW	LOW	MOD
EXTERNAL AGENT	MOD	MOD	MOD	HIGH	MOD	LOW	LOW	NONE
INTERNAL AGENT	MOD	HIGH	MOD	MOD	LOW	LOW	LOW	MOD
N. TEACHER EFFORT	MOD	HIGH	HIGH	MIXED	MIXED	MIXED	LOW	LOW
P. TEACHER SKILLS	LOW	HIGH	HIGH	LOW	LW-MD	NA	LOW	LW-MD
Q. TEACHER CONTNT	LOW	MOD	HIGH	HIGH	LOW	MOD	LOW	LOW
INSTRL CONTNT	MOD	MOD	HIGH	HIGH	MOD	MOD	LOW	MOD
R. EXTENT OF IMP	MOD	MOD-HI	MOD	HIGH	MOD	MOD	LOW	MOD
DIST IMPLEMENTN	MOD	MOD-HI	MOD	HIGH	MOD	MOD	LOW	MOD
SCH IMPLEMENTN	MOD	MOD-HI	MOD	HIGH	MOD	MOD	LOW	MOD
OTHER								
SIP PROGRAM	YES	NO	NO	YES	NO	NO	NO	NO
OTHER PROGRAMS	COMP ED		AB 803	COMP ED	COMP ED		COMP ED	COMP ED
COUNTACOL INTEG	NEITHER	NEITHER	NEITHER	VOL	COLLAT	PARTIAL	NEITHER	NEITHER
TOP DWN/BTM UP	TOP DOWN	TOP DOWN	TOP DOWN	MIXED	TOP DOWN	BOTTOM-UP	BOTTOM-UP	NA
COUPLING	TIGHT	TIGHT	TIGHT	MODERATE	LOOSE	LOOSE	LOOSE	VERY
CAP EMPHASIS	HIGH	HIGH	LOW	HIGH	MOD	LOW	LOW	HIGH
INCREASED CNTRL	YES	NO CHANGE	YES	YES	YES	YES	LOW	NO CHANGE

CAUSAL FACTORS	Cent Valley	Peninsula	Tri County	SoCal HS
	MIXED CAP GAIN SCHOOLS			
G. IMPLEMENTN MGT	HIGH	LW-MD	MOD	LOW
CROSS ROLE TN	HIGH	LW-MD	MOD	LOW
IMPLEMENTN PLAN	HIGH	LOW	MOD	LOW
H. INITIAL TRAINING	HIGH	MOD	HIGH	MOD
ADM TRAINING	MOD	MOD	MOD	LOW
TCHR TRAINING	MOD	MOD	HIGH	MOD
J. CURR DEVELPMT	HIGH	MOD	MOD	MOD
QUALITATIVE CHNG	LW-MD	LOW	LOW	LOW
CURR ALIGNMENT	HIGH	MOD	MOD	MOD
K. ADM COMMITMENT	HIGH	HIGH	HIGH	MOD
LEADERSHIP	HIGH	MOD HI	HIGH	MOD
PRESSURE	MOD	MOD	LOW	LW-MD
MONITORING	MOD	NA	LOW	LW-MD
L. LATITUDE	MOD	NA	HIGH	MOD
FIDELITY	MOD	NA	LOW	MOD
M. DIST ASSISTANCE	MOD	NA	LOW	LOW
SCH ASSISTANCE	MOD	NA	LOW	LOW
EXTERNAL AGENT	NONE	NA	NONE	LOW
INTERNAL AGENT	HIGH	NA	MOD	LOW
N. TEACHER EFFORT	HIGH	NA	HIGH	MIXED
P. TEACHER SKILLS	HIGH	NA	MOD	MOD
Q. TEACHER CONTNT	HIGH	NA	HIGH	LOW
INSTRL CONTNT	HIGH	NA	HIGH	LOW
R. EXTENT OF IMP	HIGH	NA	HIGH	NA
DIST IMPLEMENTN	HIGH	NA	HIGH	NA
SCH IMPLEMENTN	HIGH	NA	HIGH	NA
OTHER				
SIP PROGRAM	NO	ADM ONLY	YES	YES
OTHER PROGRAMS	COMP ED	PARTIAL	COMP ED	
COUNTACOL INTEG	NEITHER	COLLAT	NEITHER	COLLAT
TOP DWN/BTM UP	BOTTOM-UP	TOP DOWN	BOTTOM-UP	MIXED
COUPLING	LOOSE	VERY	LOOSE	MIXED
CAP EMPHASIS	HIGH	HIGH	LOW	LOW
INCREASED CNTRL	YES	YES	YES	NO CHANGE

TABLE 3 THE RELATIONSHIP OF IMPLEMENTATION FACTORS TO ENHANCED CAPACITY FOR ONGOING ORGANIZATIONAL CHANGE BY SCHOOL SITE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					EXTENT OF ENHANCED ORGANIZATION CAPACITY									
	HIGH				MODERATE					LOW				
	Central Valley HS	Peninsula HS	Desert HS	Orange Co HS	LA Metro HS	Capitol City HS	Bellaire Metro HS	Norcal HS		East Bay HS	LA City HS	TriCo HS	SoCal HS	
DATA SOURCE: CAUSAL FACTOR SHEETS														
ROUND 1&2 CASE STUDIES														
POLICY & OUTCOME REPORTS														
IMPLEMENTATION LEVELS														
G: IMPLEMENTATION MANAGEMENT	HIGH	LOW-MOD	MODERATE	MODERATE	HIGH	MODERATE	LOW	MODERATE		MODERATE	LOW	MODERATE	LOW	
CROSS ROLE TEAMING	HIGH	LOW-MOD	HIGH	HIGH	HIGH	LOW	LOW	LOW		LOW	MODERATE	MODERATE	LOW	
IMPLEMENTATION PLAN	HIGH	LOW	MODERATE	MODERATE	HIGH	LOW-MOD	LOW	LOW		MODERATE	LOW	MODERATE	LOW	
H: INITIAL TRAINING (CONTENT, SKILL)	HIGH	MODERATE	LOW	MODERATE	HIGH	LOW	LOW	MODERATE		LOW	MODERATE	HIGH	MODERATE	
ADMINISTRATOR TRAINING	MODERATE	MODERATE	MODERATE	MODERATE	HIGH	LOW	LOW	MODERATE		LOW	MODERATE	MODERATE	LOW	
TEACHER TRAINING	MODERATE	MODERATE	LOW	MODERATE	HIGH	LOW	LOW	MODERATE		LOW	MODERATE	HIGH	MODERATE	
J: CURRICULUM DEVELOPMENT	HIGH	MODERATE	LOW	MODERATE	HIGH	HIGH	LOW	HIGH		HIGH	MODERATE	MODERATE	MODERATE	
QUALITATIVE CHANGE	LOW-MOD	LOW	LOW	LOW	MODERATE	LOW	LOW	MODERATE		MODERATE	LOW	LOW	LOW	
CURRICULUM ALIGNMENT	HIGH	MODERATE	HIGH	MODERATE	HIGH	HIGH	LOW	HIGH		HIGH	HIGH	MODERATE	MODERATE	
K: ADMINISTRATIVE COMMITMENT	HIGH	HIGH	HIGH	HIGH	MODERATE	MODERATE	LOW	HIGH		HIGH	LOW	HIGH	MODERATE	
LEADERSHIP	HIGH	MOD-HIGH	HIGH	HIGH	MODERATE	MODERATE	LOW	HIGH		HIGH	LOW	HIGH	MODERATE	
PRESSURE	MODERATE	MODERATE	LOW	HIGH	HIGH	LOW	LOW	LOW		MODERATE	LOW	LOW	LOW-MOD	
MONITORING	MODERATE	NA	LOW	MODERATE	HIGH	LOW	LOW	LOW		MODERATE	LOW	LOW	LOW-MOD	
L: PROGRAM LATITUDE	MODERATE	NA	HIGH	MODERATE	LOW	LOW	HIGH	LOW		LOW	HIGH	HIGH	MODERATE	
DEGREE OF FIDELITY	MODERATE	NA	LOW	MODERATE	HIGH	MODERATE	LOW	HIGH		HIGH	MODERATE	LOW	MODERATE	
M: DISTRICT ONGOING ASSISTANCE	MODERATE	NA	LOW	MODERATE	HIGH	LOW	MODERATE	MODERATE		HIGH	MODERATE	LOW	LOW	
SCHOOL ONGOING ASSISTANCE	MODERATE	NA	MODERATE	MODERATE	HIGH	LOW	LOW	MODERATE		MODERATE	MODERATE	LOW	LOW	
EXTERNAL LEADING AGENT	NOT USED	NA	HIGH	MODERATE	MODERATE	LOW	LOW	NOT USED		NOT USED	MODERATE	NOT USED	LOW	
INTERNAL LEADING AGENT	HIGH	NA	MODERATE	MODERATE	HIGH	LOW	LOW	MODERATE		MODERATE	LOW	MODERATE	LOW	
N: TEACHER EFFORT	HIGH	NA	MIXED	MODERATE	HIGH	MIXED	LOW	LOW		HIGH	MIXED	HIGH	MIXED	
P: TEACHER SKILL MASTERY	HIGH	NA	LOW	LOW	HIGH	NA	LOW	LOW-MOD		HIGH	LOW-MOD	MODERATE	MODERATE	
Q: TEACHER COMMITMENT	HIGH	NA	HIGH	LOW	MODERATE	MODERATE	LOW	LOW		HIGH	LOW	HIGH	LOW	
INSTITUTIONAL COMMITMENT	HIGH	NA	HIGH	MODERATE	MODERATE	MODERATE	LOW	MODERATE		HIGH	MODERATE	HIGH	LOW	
R: EXTENT OF IMPLEMENTATION	HIGH	NA	HIGH	MODERATE	MOD-HIGH	MODERATE	LOW	MODERATE		MODERATE	MODERATE	HIGH	NA	
DISTRICT IMPLEMENTATION	HIGH	NA	HIGH	MODERATE	MOD-HIGH	MODERATE	LOW	MODERATE		MODERATE	MODERATE	HIGH	NA	
SCHOOL IMPLEMENTATION	HIGH	NA	HIGH	MODERATE	MOD-HIGH	MODERATE	LOW	MODERATE		MODERATE	MODERATE	HIGH	NA	
OTHER COMPARATIVE FIELDS														
SIP PROGRAM	NO	ADMIN&SIG	YES		NO	NO	NO	NO		NO	NO	YES	YES	
OTHER PROG'S (M/L/P/Q/R/LEP)	SCE-LEP-M/L-P/Q	ADMIN-SIG	SCE-LEP-CHI	SCE-LEP-CHI			SCE-LEP-M/L/Q/R	SCE-LEP-CHI		AB 803	ENH/LEP	SCE-LEP-CHI		
COURT/VOLUNTARY INTEGRATION	NEITHER	COURT ORDER	VOLUNTARY	NEITHER	NEITHER	NEITHER	NEITHER	NEITHER		NEITHER	COURT ORDER	NEITHER	COURT ORDER	
TOP DOWN OR BOTTOM UP CHANGE	MIDDLE OUT	TOP-DOWN	MIXED	TOP-DOWN	TOP-DOWN	MIXED	BOTTOM-UP	NA		TOP-DOWN	TOP-DOWN	BOTTOM-UP	MIXED	
TIGHT/LOOSE ORG COUPLING	LOOSE	TIGHT	MODERATE	TIGHT	TIGHT	LOOSE	LOOSE	TIGHT		TIGHT	LOOSE	LOOSE	MIXED	
DEGREE OF CAP TEST EMPHASIS	HIGH	HIGH	HIGH	HIGH	HIGH	LOW	LOW	HIGH		LOW	MODERATE	LOW	LOW	
INCREASED CENTRALIZATION	YES	YES	YES	YES	MOD-HIGH	YES	LOW	MOD-HIGH		YES	YES	YES	MOD-HIGH	
OTHER ROUND 1&2	Availability of competitive & facilitat'g state reform effort	The calif Ach Coal provides SIP atmosphere	813 calls more coll on of a low plan	Pres. ach coal 2 Vice. & comm left by 1989	Dist ha & sr ads for many local deadlin	Dist ha 2yr coal local coal calls divers educational plans	SB 813 facilitat plans in dist takes in calls inadequate	Dist plans calls school & community coal tchr depts		Ech sch in dist req to develo site inspry plan	Dist cho plan by sch in the reform effort	Dist takes is mpl approch gibing to be ov directive effort	SIP prog hd perve indivc on reform effort	

TABLE 4

THE RELATIONSHIP OF IMPLEMENTATION FACTORS TO ENHANCED CAPACITY FOR ONGOING ORGANIZATIONAL CHANGE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1		EXTENT OF ENHANCED ORGANIZATION CAPACITY															
2																	
3		HIGH		MODERATE		LOW											
4																	
5																	
6																	
7	DATA SOURCE: CAUSAL FACTOR SHEETS																
8	ROUND 1&2 CASE STUDIES																
9	POLICY & OUTCOME REPORTS																
10																	
11	IMPLEMENTATION LEVELS																
12																	
13	G: IMPLEMENTATION MANAGEMENT	MODERATE	2.33	MODERATE	2.00	LOW/MODERATE	1.89										
14	CROSS ROLE TRAINING	HIGH	2.83	LOW/MODERATE	1.89	LOW/MODERATE	1.89										
15	IMPLEMENTATION PLAN	MODERATE	2.00	LOW/MODERATE	1.83	LOW/MODERATE	1.89										
16																	
17	H: INITIAL TRAINING (CONTENT, SKILL	MODERATE	2.00	LOW/MODERATE	1.78	MODERATE	2.00										
18	ADMINISTRATOR TRAINING	MODERATE	2.00	LOW/MODERATE	1.78	LOW/MODERATE	1.89										
19	TEACHER TRAINING	LOW/MODERATE	1.75	LOW/MODERATE	1.78	MODERATE	2.00										
20																	
21	J: CURRICULUM DEVELOPMENT	MODERATE	2.00	HIGH	2.00	MODERATE	2.00										
22	QUALITATIVE CHANGE	LOW	1.10	LOW/MODERATE	1.89	LOW	1.89										
23	CURRICULUM ALIGNMENT	HIGH	2.00	HIGH		HIGH	2.00										
24																	
25	K: ADMINISTRATIVE CONSISTENCY	HIGH	2.00	HIGH	2.00	MODERATE	2.00										
26	LEADERSHIP	HIGH	2.00	MODERATE	2.00	MODERATE	2.00										
27	PRESSURE	MODERATE	2.00	LOW/MODERATE	1.89	LOW	1.89										
28	MONITORING	LOW/MODERATE	1.67	LOW/MODERATE	1.89	LOW	1.89										
29																	
30	L: PROGRAM LATITUDE	MODERATE	2.33	LOW/MODERATE	1.89	LOW	2.00										
31	DEGREE OF FIDELITY	LOW/MODERATE	1.67	MODERATE	2.00	MODERATE	2.00										
32																	
33	M: DISTRICT ONGOING ASSISTANCE	LOW	1.33	LOW/MODERATE	1.78	LOW/MODERATE	1.78										
34	SCHOOL ONGOING ASSISTANCE	MODERATE	2.00	MODERATE	2.00	LOW/MODERATE	1.89										
35	EXTERNAL LEADING AGENT	HIGH	2.50	LOW	1.83	LOW/MODERATE	1.89										
36	INTERNAL LEADING AGENT	MODERATE	2.33	LOW/MODERATE	1.78	LOW/MODERATE	1.89										
37																	
38	N: TEACHER EFFICACY	MODERATE	2.33	LOW/MODERATE	1.78	HIGH	2.50										
39																	
40	P: TEACHER SKILL MASTERY	LOW/MODERATE	1.67	LOW/MODERATE	1.89	HIGH	2.50										
41																	
42	Q: TEACHER COMMITMENT	MODERATE	2.33	LOW/MODERATE	1.78	MODERATE	2.00										
43	INSTITUTIONAL COMMITMENT	HIGH	2.67	LOW/MODERATE	1.78	MODERATE	2.00										
44																	
45	R: EXTENT OF IMPLEMENTATION	HIGH	2.67	LOW/MODERATE	1.89	MODERATE	2.33										
46	DISTRICT IMPLEMENTATION	HIGH	2.67	LOW/MODERATE	1.89	MODERATE	2.33										
47	SCHOOL IMPLEMENTATION	HIGH	2.67	LOW/MODERATE	1.89	MODERATE	2.33										
48																	
49	OTHER COMPARATIVE FIELDS																
50	SIP PROGRAM																
51	OTHER PROG'S (661-69-663-LEP)																
52	COURT/VOLUNTARY INTEGRATION																
53	TOP DOWN OR BOTTOM UP CHANGE																
54	HIGH/LOOSE, DIST SCHL COUPLING																
55	DEGREE OF CAP TEST EMPHASIS																
56	INCREASED CENTRALIZATION																
57																	
58	OTHER COMMENTS																
59																	
60																	
61																	
62																	
63																	
64																	